

ABSTRACT

A passive inductive switch for coupling a battery to a load in a remotely deployed battery-powered electronic device. The switch operates in response to a transmitted magnetic field at a particular frequency. The switch includes an antenna for transforming the magnetic field into an induced voltage and a voltage detector for sensing the induced voltage and triggering a switching element. The switch operates in a standby mode until a sufficient voltage is induced in the antenna which causes the switch to couple the battery to the load. In the standby mode the switch draws a negligible amount of power, which permits the device to be deployed in the field for long periods of time without expending significant battery power.